

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Patent Application No. 09/840,824

REMARKS

Reconsideration and allowance of the subject application are respectfully requested. By this Amendment, Applicant has canceled claims 10 and 11. Thus, claims 1-9 and 12 are now pending in the application. In response to the Office Action (Paper No. 7), Applicant respectfully submits that the pending claims define patentable subject matter.

Claims 1-9 and 12 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. In particular, the Examiner maintains that although independent claims 1-3 and 7 recite “a pair of (first and second) cross belt members arranged in parallel to each other in a common plane in a circumferential direction of the tire”, Figure 1 shows the cross belt members are arranged in parallel to each other in a common curved plane (i.e., not in a common flat plane). By this Amendment, Applicant has amended claims 1-3 and 7 to delete the phrase “in a common plane”. Accordingly, the Examiner is requested to remove the § 112, first paragraph, rejection.

The specification is objected to as failing to provide a proper antecedent basis for the claimed subject matter. In particular, the Examiner maintains the specification should be amended to indicate that “a pair of cross belt members are arranged in parallel to each other in a common curved plane in a circumferential direction of the tire”, as claimed. In view of the amendment to claims 1-3 and 7 discussed above, the Examiner is requested to remove the objection to the specification.

Claims 1-9 and 12 are rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as being unpatentable over Armellin (EP 756949). Claims 1-9

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and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Armellin in view of Ubukata et al. (USP 6,250,596; hereafter “Ubukata”).

With regard to independent claims 1-3 and 7, the Examiner asserts, in the second full paragraph of page 4, “there is no difference between the claimed tire and the tire embodiment shown in Figure 3 of [Armellin]”. In particular, the Examiner contends Armellin “suggests locating a pair of spaced cord containing strips 8c, 8d (spaced cross belt members) adjacent a spiral belt … [and] teaches that the spaced cross belt members define a radially inner layer and are an alternative to the embodiment of Figures 1 and 2 in which the radially inner layer, which is adjacent the spiral belt, is shown as being in a common curved plane.” The Examiner further asserts “that since the number of mounting possibilities is limited to four, [Armellin] is considered to disclose each of the … four mounting possibilities”.

By this Amendment, Applicant has amended claims 1-3 and 7 to recite that the pair of cross belt members is “arranged on an outer circumferential side of the spiral belt and in parallel to each other in a circumferential direction of the tire so as to be disposed on opposite sides of an equatorial plane of the tire and separated by an opening space.”¹ Applicant respectfully submits that Armellin does not teach or suggest this feature of the claimed invention. Instead, as shown in Figure 3 of Armellin, the cited reference teaches that the radially internal layer strips 8c and 8d strips (which the Examiner contends corresponds to the claimed cross belt members) are

¹ Support for the claim amendments can be found in paragraph 27 on page 8 of the specification, for example.

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arranged on an inner circumferential side of the radially external layer (which the Examiner contends corresponds to the claimed spiral belt).

As shown in Table 1 on page 15 of the present application, arranging the cross belt member on the outer circumferential side of the spiral belt (Example 1), as claimed, provides greater high-speed stability, handling and corner gripping as compared to arranging the cross belt member on the inner circumferential side of the spiral belt (Example 2), as disclosed by Armellin (i.e., Example 1 corresponds to the subject matter of claims 1-3 and 7, and Example 2 corresponds to the teachings of Armellin). Further, although the Examiner contends that no unexpected results have been shown for mounting the front tire and the rear tire in the manner claimed, the present application (page 5, lines 2-11) teaches that the rigidity required against an external force acting on the front wheel during braking and an external force acting on the rear wheel in traction can effectively be ensured by making the cord inclinations of the belt members in the front and rear tires opposite to each other (i.e., acute and obtuse angles with respect to the equatorial plane in a forward rotating direction of the tire).

Similarly, Applicant respectfully submits that it is quite clear that Ubukata does not teach or suggest the claimed cross belt members, or provide any suggestion or motivation for modifying the teachings of Armellin to produce the claimed cross belt members. Rather, Ubukata (which the Examiner cites Ubukata for showing “that the same tire can be mounted in either of two different directions at the same wheel position”) simply discloses the cord inclination direction of an outer belt layer “a” of two superposed cross belt layers (i.e., inner and outer belt layers).

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Accordingly, Applicant respectfully submits that independent claims 1-3 and 7, as well as dependent claims 4-6, 8, 9 and 12, should be allowable because the cited references do not teach or suggest all of the features of the claims.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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